

In the Claims

Claims 1-63 are canceled.

64. [Amended] A wafer processing apparatus comprising:

a wafer holder adapted to receive a wafer having an electrical coupling, the wafer holder including an electrical coupling configured to electrically couple with the electrical coupling of the wafer and communicate signals between the wafer and the wafer holder of the wafer processing apparatus.

65. [Previously Added] The wafer processing apparatus according to claim 64 further comprising a data gathering device coupled with the electrical coupling of the wafer holder and configured to receive the signals.

66. [Previously Added] The wafer processing apparatus according to claim 65 further comprising a contact plate configured to communicate the signal intermediate the wafer holder and the data gathering device.

67. [Previously Added] The wafer processing apparatus according to claim 64 wherein the wafer holder includes a first surface, a second surface, and an electrical interconnect configured to electrically couple the first surface and the second surface.

68. [Previously Added] The wafer processing apparatus according to claim 67 wherein the first surface of the wafer holder is configured to face a received wafer and the second surface is configured to face a chuck.

69. [Previously Added] The wafer processing apparatus according to claim 64 wherein the wafer holder includes a plurality of electrical couplings adapted to couple with a plurality of electrical couplings of the wafer.

70. [Previously Added] The wafer processing apparatus according to claim 64 wherein the wafer holder comprises a chuck.

71. [Previously Added] The wafer processing apparatus according to claim 64 wherein the wafer holder comprises a chuck configured to receive one of a calibration wafer and a production wafer.

72. [Previously Added] The wafer processing apparatus according to claim 71 wherein the wafer holder includes vacuum chambers adapted to receive a vacuum to couple one of the calibration wafer and the production wafer with the chuck.

73. [Previously Added] The wafer processing apparatus according to claim 64 wherein the wafer holder comprises an intermediate member adapted to couple with a chuck.

74. [Previously Added] The wafer processing apparatus according to claim 64 wherein the wafer holder includes a vacuum chamber adapted to receive a vacuum to couple a received wafer with the wafer holder.

75. [Previously Added] The wafer processing apparatus according to claim 64 wherein the electrical interconnect comprises a conductive column configured to extend outward from plural surfaces of the wafer holder.

76. [Previously Added] The wafer processing apparatus according to claim 75 further comprising a contact plate including circuitry configured to provide electrical connection with the conductive column.

77. [Amended] The wafer processing apparatus according to claim 64 wherein the electrical coupling of the ~~workpiece~~ wafer holder is adapted to contact the electrical coupling of the wafer.

78. [Previously Added] The wafer processing apparatus according to claim 64 wherein the wafer holder is adapted to expose the wafer to a processing environment to process the wafer.

79. [Amended] A wafer processing apparatus comprising:

a wafer holder having circuitry configured to communicate a process signal from a received wafer and the process signal containing information regarding processing of the wafer using the wafer processing apparatus.

80. [Previously Added] The wafer processing apparatus according to claim 79 wherein the wafer holder is adapted to expose the wafer to a processing environment to process the wafer.

81. [Previously Added] A wafer processing apparatus comprising:

a chuck including a surface, an electrical coupling adjacent the surface, and electrical interconnect configured to connect with the electrical coupling of the chuck and conduct a signal within the chuck;

an intermediate member adapted to receive a wafer and the intermediate member having a first surface and a second surface and the intermediate member including:

an electrical coupling adjacent the first surface and configured to couple with the electrical coupling of the chuck;

an electrical coupling adjacent the second surface; and

an electrical interconnect configured to connect the electrical coupling adjacent the first surface and the electrical coupling adjacent the second surface; and

a wafer configured to couple with the second surface of the intermediate member, the wafer including a sensor and an electrical coupling configured to provide electrical

connection of the sensor with the electrical coupling of the second surface of the intermediate member.

82. [Previously Added] The wafer processing apparatus according to claim 81 further comprising a data gathering device coupled with the electrical coupling of the chuck and configured to receive the signal.

83. [Previously Added] The wafer processing apparatus according to claim 82 further comprising a contact plate configured to communicate the signal intermediate the chuck and the data gathering device.

84. [Previously Added] The wafer processing apparatus according to claim 81 wherein the sensor comprises a resistance temperature device.

85. [Previously Added] The wafer processing apparatus according to claim 81 wherein the wafer comprises a calibration wafer.

86. [Previously Added] The wafer processing apparatus according to claim 81 wherein the electrical interconnect comprises a conductive column configured to extend outward from plural surfaces of the chuck.

87. [Previously Added] The wafer processing apparatus according to claim 86 further comprising a contact plate including circuitry configured to provide electrical connection with electrical couplings of the chuck.

88. [Previously Added] The wafer processing apparatus according to claim 81 wherein the intermediate member is configured to expose the wafer to a processing environment to process the wafer.

89. [Previously Added] A wafer processing apparatus comprising:

a chuck including a surface, a plurality of electrical couplings adjacent the surface, and a plurality of electrical interconnects configured to connect with respective electrical couplings of the chuck and conduct signals within the chuck;

an intermediate member adapted to receive a wafer and the intermediate member having a first surface and a second surface and the intermediate member including:

a plurality of electrical couplings adjacent the first surface and configured to couple with respective electrical couplings of the chuck;

a plurality of electrical couplings adjacent the second surface; and

a plurality of electrical interconnects configured to electrically connect the electrical couplings of the first surface with respective electrical couplings of the second surface;

a calibration wafer configured to couple with the second surface of the intermediate member, the calibration wafer including a plurality of resistance temperature devices

configured to generate process signals, and a plurality of electrical connections configured to electrically connect the resistance temperature devices with respective electrical couplings of the second surface of the intermediate member; and

a data gathering device coupled with the electrical interconnects of the chuck and configured to receive the process signals from the resistance temperature devices through the intermediate member and the chuck.

90. [Previously Added] The wafer processing apparatus according to claim 89 wherein the intermediate member is configured to expose the wafer to a processing environment to process the wafer.

91. [Previously Added] An electronic device workpiece processing apparatus comprising:

a workpiece holder adapted to receive an electronic device workpiece having an electrical coupling, the workpiece holder including an electrical coupling configured to electrically couple with the electrical coupling of the electronic device workpiece and communicate signals between the electronic device workpiece and the workpiece holder, wherein the workpiece holder includes a vacuum chamber adapted to receive a vacuum to couple a received electronic device workpiece with the workpiece holder.

92. [Previously Added] The apparatus of claim 91 wherein the workpiece holder is configured to expose the electronic device workpiece to a processing environment to process the electronic device workpiece.

93. [Previously Added] An electronic device workpiece processing apparatus comprising:

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a workpiece holder adapted to receive an electronic device workpiece having an electrical coupling, the workpiece holder including an electrical coupling configured to electrically couple with the electrical coupling of the electronic device workpiece and communicate signals between the electronic device workpiece and the workpiece holder, wherein the electrical coupling of the workpiece holder is configured to extend outward from plural surfaces of the workpiece holder; and

a contact plate including circuitry configured to provide electrical connection with the conductive column.

94. [Previously Added] The apparatus of claim 93 wherein the workpiece holder is configured to expose the electronic device workpiece to a processing environment to process the electronic device workpiece.

95. [Previously Added] An electronic device workpiece processing apparatus comprising:

a chuck including a surface, an electrical coupling adjacent the surface, and electrical interconnect configured to connect with the electrical coupling of the chuck and conduct a signal within the chuck;

an intermediate member having a first surface and a second surface and the intermediate member including:

an electrical coupling adjacent the first surface and configured to couple with the electrical coupling of the chuck;

an electrical coupling adjacent the second surface; and

an electrical interconnect configured to connect the electrical coupling adjacent the first surface and the electrical coupling adjacent the second surface;

an electronic device workpiece configured to couple with the second surface of the intermediate member, the electronic device workpiece including a sensor and an electrical coupling configured to provide electrical connection of the sensor with the electrical coupling of the second surface of the intermediate member;

a data gathering device coupled with the electrical coupling of the chuck and configured to receive the signal; and

a contact plate configured to communicate the signal intermediate the chuck and the data gathering device.

96. [Previously Added] The apparatus of claim 95 wherein the intermediate member is configured to expose the electronic device workpiece to a processing environment to process the electronic device workpiece.

97. [Previously Added] An electronic device workpiece processing apparatus comprising:

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a chuck including a surface, an electrical coupling adjacent the surface, and electrical interconnect configured to connect with the electrical coupling of the chuck and conduct a signal within the chuck;

an intermediate member having a first surface and a second surface and the intermediate member including:

an electrical coupling adjacent the first surface and configured to couple with the electrical coupling of the chuck;

an electrical coupling adjacent the second surface; and

an electrical interconnect configured to connect the electrical coupling adjacent the first surface and the electrical coupling adjacent the second surface; and

an electronic device workpiece configured to couple with the second surface of the intermediate member, the electronic device workpiece including a sensor comprising a resistance temperature device, and an electrical coupling configured to provide electrical connection of the sensor with the electrical coupling of the second surface of the intermediate member.

98. [Previously Added] The apparatus of claim 97 wherein the intermediate member is configured to expose the electronic device workpiece to a processing environment to process the electronic device workpiece.

99. [Previously Added] An electronic device workpiece processing apparatus comprising:

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a chuck including a surface, an electrical coupling adjacent the surface, and electrical interconnect configured to connect with the electrical coupling of the chuck and conduct a signal within the chuck;

a contact plate including circuitry configured to provide electrical connection with the electrical coupling of the chuck;

an intermediate member having a first surface and a second surface and the intermediate member including:

an electrical coupling adjacent the first surface and configured to couple with the electrical coupling of the chuck;

an electrical coupling adjacent the second surface; and

an electrical interconnect configured to connect the electrical coupling adjacent the first surface and the electrical coupling adjacent the second surface, wherein the electrical interconnect comprises a conductive column configured to extend outward from plural surfaces of the chuck; and

an electronic device workpiece configured to couple with the second surface of the intermediate member, the electronic device workpiece including a sensor and an electrical

coupling configured to provide electrical connection of the sensor with the electrical coupling of the second surface of the intermediate member.

100. [Previously Added] The apparatus of claim 99 wherein the intermediate member is adapted to expose the electronic device workpiece to a processing environment to process the electronic device workpiece.

101. [Amended] An electronic device workpiece processing apparatus comprising:
an electronic device workpiece including a sensor and an electrical coupling; and
an intermediate member including a surface having an electrical coupling and adapted to expose the electronic device workpiece to a processing environment to process the wafer electronic device workpiece;

wherein the electrical coupling of the electronic device workpiece is configured to provide electrical connection of the sensor with the electrical coupling of the surface of the intermediate member.

102. [Previously Added] The apparatus according to claim 101 wherein the electronic device workpiece comprises a wafer.

GA 103. [New] The wafer processing apparatus according to claim 64 wherein the wafer holder is configured to support a wafer for processing within the wafer processing apparatus to form a plurality of discrete integrated circuits of a plurality of respective dies to be singulated from the wafer at a subsequent moment in time.

104. [New] The wafer processing apparatus according to claim 64 wherein the wafer holder is configured to expose a wafer to a processing environment within the wafer processing apparatus to form a plurality of discrete integrated circuits of a plurality of respective dies to be singulated from the wafer at a subsequent moment in time.

105. [New] The wafer processing apparatus according to claim 64 further comprising a processing area of the wafer processing apparatus configured to process a wafer supported using the wafer holder to fabricate a plurality of discrete integrated circuits of a plurality of respective dies to be singulated from the wafer at a subsequent moment in time.

106. [New] The wafer processing apparatus according to claim 64 wherein the wafer processing apparatus is configured to process a wafer supported using the wafer holder to fabricate a plurality of discrete integrated circuits of a plurality of respective dies to be singulated from the wafer at a subsequent moment in time.

107. [New] The wafer processing apparatus according to claim 64 wherein the wafer comprises a semiconductive wafer comprising a plurality of integrated circuit dies prior to singulation of at least one of the dies at a subsequent moment in time.

108. [New] An article of manufacture comprising:

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a wafer processing apparatus comprising a wafer holder configured to receive a wafer having an electrical coupling, and wherein the wafer holder comprises an electrical coupling configured to electrically couple with the electrical coupling of the wafer and to communicate signals between the wafer and the wafer holder

109. [New] The article of claim 103 wherein the electrical coupling of the wafer holder is configured to contact the electrical coupling of the wafer.

110. [New] The article of claim 103 wherein the communicated signals comprise information regarding processing of the wafer using the wafer processing apparatus.

111. [New] An electronic device workpiece processing apparatus comprising:
an intermediate member comprising a first surface and a second surface, wherein the second surface comprises an electrical coupling; and

an electronic device workpiece including a sensor and an electrical coupling configured to provide electrical connection of the sensor with the electrical coupling of the second surface of the intermediate member.